# ROAD SYSTEM

# BRIDGES

#### BR 1-001 AND BR 1-001A ON RISING SUN LANE OVER BRANDYWINE CREEK

**PROJECT SCOPE/DESCRIPTION:** This project will rehabilitate existing steel truss members and substructure; place a high performance deck overlay; make safety improvements at approaches; and fill scour holes and rehabilitate existing stone masonry abutment.

**PROJECT JUSTIFICATION:** Both bridges are structurally deficient and currently rank 9<sup>th</sup> and 63<sup>rd</sup> out of 1,399, respectively, on the department's bridge deficiency list (via the bridge management program).

**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Bridges

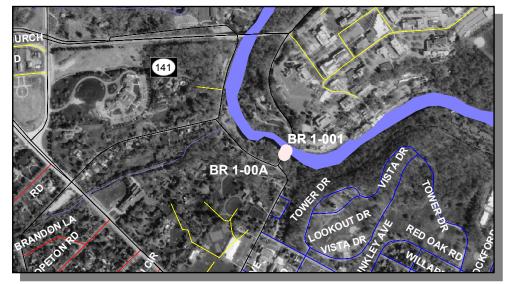
**Functional Category:** Preservation

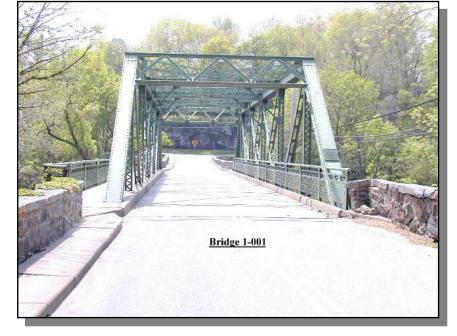
Representative District: 4 Senatorial District: 4











**Bridge 1-001** 

# BR 1-001 AND BR 1-001A ON RISING SUN LANE OVER BRANDYWINE CREEK (CONTINUED)

#### PROJECT FUNDING INFORMATION

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 1-001 and BR 1-001A on Rising Sun Lane over Brandywine Creek		\$ 1,286.5						
Prior Years	State			\$ 346.5	\$ 346.5	\$ 182.9	\$ 163.6	\$ 0.0
	Federal			\$ 240.0	\$ 240.0	\$ 0.0	\$ 240.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 1,286.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 0.0
-	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 140.0				\$ 140.0
•	Federal			\$ 560.0				\$ 560.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 140.0
•	Federal			\$ 0.0				\$ 560.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 486.5	\$ 346.5			\$ 140.0
	Federal			\$ 800.0	\$ 240.0			\$ 560.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,286.5	\$ 1,286.5	\$ 1,286.5	\$ 586.5	\$ 182.9	\$ 403.6	\$ 700.0

# BR 1-001 AND BR 1-001A ON RISING SUN LANE OVER BRANDYWINE CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	BR 1-001 and BR 1-001A on Rising Sun Lane over Brandywine Creek	PE RW	100% ST 100% ST	\$ 261.5 25.0	\$ 261.5 25.0	\$ 0.0 0.0	\$ 0.0 0.0	ψ 0.0	\$ 0.0 0.0	\$ 0.0 0.0
		C	80% FHWA	1,000.0	300.0		0.0		700.0	
	Total All Funds			\$ 1,286.5	\$ 586.5	\$ 0.0	\$ 0.0	\$ 0.0	\$ 700.0	\$ 0.0

BR 1-00B

#### BR 1-001B ON SR 5, KENNETT PIKE OVER RAILROAD EAST OF SR141

PROJECT SCOPE/DESCRIPTION: The proposed improvements to Bridge 1-001B, on SR 52, Kennett Pike, will replace the existing superstructure with prestressed concrete beams and a concrete deck. Improvements to the operations of the A. I. DuPont Middle School will be done in conjunction with the bridgework.

**PROJECT JUSTIFICATION:** The superstructure of this bridge is in poor condition, and the encased concrete steel beams are exposed. This bridge is currently ranked 31st out of 1,399 on the department's bridge deficiency list (via the bridge management program).

New Castle **County:** 

Municipality:

**Funding Program:** Road System – Bridges

**Functional Category:** Preservation

Representative District: 4 **Senatorial District:** 







**Bridge 1-001B** 



# BR 1-001B ON SR 52, KENNETT PIKE OVER RAILROAD EAST OF SR141 (CONTINUED)

#### PROJECT FUNDING INFORMATION

DEPARTMENT OF TRANSPORTATION

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 1-001B on SR 52, Kennett Pike		0.2650						
over Railroad East of SR141		\$ 3,677.0						
Prior Years	State			\$ 57.0	\$ 57.0	\$ 57.0	\$ 0.0	\$ 0.0
Thorres tars	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	- Ctiles			\$ 0.0	\$ 010	J 010	<b>J</b> 010	<b>\$</b> 010
FY 2004	State		\$ 3,677.0	\$ 1,324.0	\$ 870.9	\$ 333.1	\$ 537.8	\$ 453.1
	Federal		,	\$ 912.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 912.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 453.1
	Federal			\$ 1,384.0				\$ 2,296.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 453.1
	Federal			\$ 0.0				\$ 2,296.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 453.1
	Federal			\$ 0.0				\$ 2,296.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 453.1
	Federal			\$ 0.0				\$ 2,296.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 1,381.0	\$ 927.9			\$ 453.1
	Federal			\$ 2,296.0	\$ 0.0			\$ 2,296.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
T ( LAUE )		0.24=0	0.25=0	0.25=0	0.00=0	0.2004	0 727 0	0.2540.4
Total All Funds		\$ 3,677.0	\$ 3,677.0	\$ 3,677.0	\$ 927.9	\$ 390.1	\$ 537.8	\$ 2,749.1

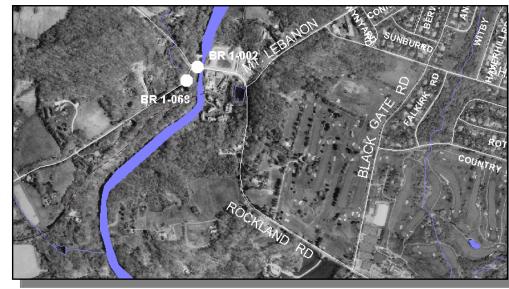
# BR 1-001B ON SR 52, KENNETT PIKE OVER RAILROAD EAST OF SR141 (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	BR 1-001B on SR 52, Kennett Pike over Railroad East of SR141									
99-071-08	Bridge Work	PE	100% ST	Ф. 207.0		A 250.0	Φ. 0.0	Φ. 0.0		
77-071-00	Bridge Work	C	80% FHWA	\$ 307.0 790.0	\$ 57.0 0.0	\$ 250.0 158.0			\$ 0.0 0.0	
	Concrete Patching and Streetscape Improvements from Bridge to Presidential Drive	С	80% FHWA	1,140.0	0.0	1,140.0	0.0	0.0	0.0	0.0
	Roadway Improvements from Bridge to Presidential Drive	С	80% FHWA	940.0	0.0	188.0	752.0	0.0	0.0	0.0
	Paving from Greenhill Avenue to Bridge	С	100% ST	500.0	0.0	500.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 3,677.0	\$ 57.0	\$ 2,236.0	\$ 1,384.0	\$ 0.0	\$ 0.0	\$ 0.0

#### BR 1-068 AND BR 1-002 ON N232, ROCKLAND ROAD OVER BRANDYWINE CREEK

PROJECT SCOPE/DESCRIPTION: These bridges are located in the Rockland Historic District. Bridge 1-068 will require structural repairs. Bridge 1-002 will receive cosmetic improvements and repairs, which will prolong the life of this historic structure. In both cases, repairs will take into account the historical surrounding. Bridge 1-068 improvements will include replacement of the superstructure with prestressed concrete beams and stone-faced bridge rails, construction of two wingwalls, and repair of the supporting substructure. Bridge 1-002 improvements will include repair of the concrete beam encasements, replacement of deck joint seals, and waterproofing the deck.

**PROJECT JUSTIFICATION:** Bridges 1-068 and 1-002 are in need of repair to maintain their historic integrity and structural capacity. Bridge 1-068 is currently ranked 129<sup>th</sup> and Bridge 1-002 is currently ranked 128<sup>th</sup> out of 1,399 on the department's bridge deficiency list (via the bridge management program).



New Castle **County:** 

**Municipality:** 

**Funding Program:** Road System – Bridges

**Functional Category:** Preservation

Representative District: 4, 10

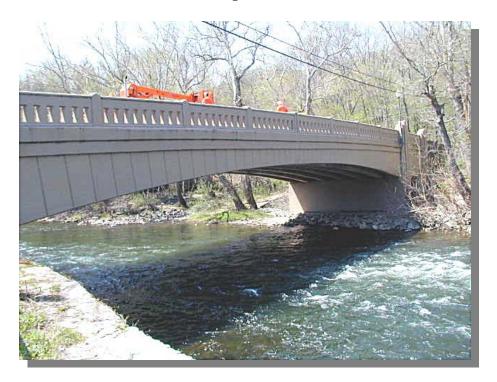
**Senatorial District:** 



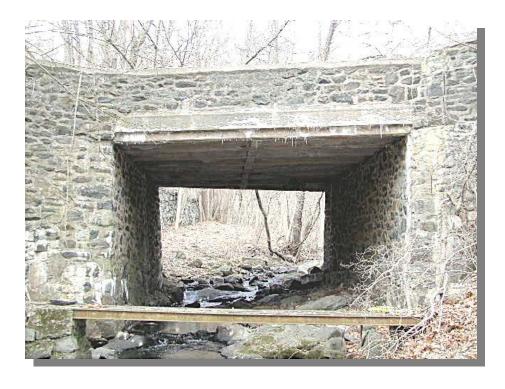


# BR 1-068 AND BR 1-002 ON N232, ROCKLAND ROAD OVER BRANDYWINE CREEK (CONTINUED)





**Bridge 1-002** 



#### BR 1-068 AND BR 1-002 ON N232, ROCKLAND ROAD OVER BRANDYWINE CREEK (CONTINUED)

#### PROJECT FUNDING INFORMATION

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 1-068 and BR 1-002 on N232, Rockland Road over Brandywine Creek		\$ 1,183.7						
Prior Years	State			\$ 176.4	\$ 176.4	\$ 171.9	\$ 4.5	\$ 0.0
Thoracas	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 1,184.0	\$ 201.5	\$ 201.5	\$ 0.0	\$ 201.5	\$ 0.0
	Federal			\$ 806.1	\$ 806.1	\$ 0.0	\$ 806.1	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 0.0
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 377.9	\$ 377.9			\$ 0.0
	Federal			\$ 806.1	\$ 806.1			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 1,183.7	\$ 1,184.0	\$ 1,184.0	\$ 1,184.0	\$ 171.9	\$ 1,012.1	\$ 0.0

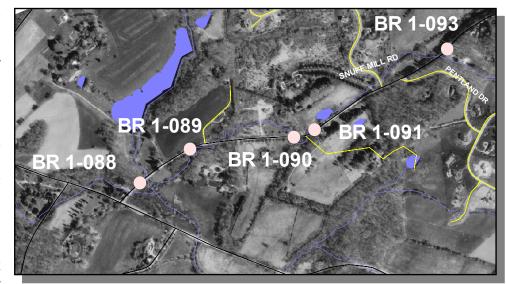
# BR 1-068 AND BR 1-002 ON N232, ROCKLAND ROAD OVER BRANDYWINE CREEK (CONTINUED)

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
22-071-01	BR 1-068 and BR 1-002 on N232, Rockland Road over Brandywine Creek	RW C	100% ST 80% FHWA	\$ 176.4 1,007.6	\$ 176.4 0.0	\$ 0.0 1,007.6	\$ 0.0 0.0	4 0.0	\$ 0.0 0.0	\$ 0.0 0.0
	Total All Funds			\$ 1,184.0	\$ 176.4	\$ 1,007.6	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0

**PROJECT SCOPE/DESCRIPTION:** The Bridge 1-088 project, near Old Kennett Road, consists of improvements that will include replacing the existing concrete deck; stabilizing the existing substructure; repointing the stone masonry; repainting the steel beams; and installing scour countermeasures. The existing culvert will be replaced with a new reinforced concrete box culvert.

The remaining bridges will be replaced with concrete boxes and a concrete rigid frame (Bridge 1-089) with stone parapets and wingwalls. Roadway slope failures will also be fixed. N247, Snuff Mill Road from Old Kennett Road to SR 52, Kennett Pike will be paved. Construction began in May 2003.

**PROJECT JUSTIFICATION:** Bridge 1-088 ranks 151<sup>st</sup> on the bridge deficiency list. Bridge 1-089 ranks 29<sup>th</sup> on the bridge deficiency list. Bridge 1-090, Bridge 1-091 and Bridge 1-093 are functionally obsolete and rank 186<sup>th</sup>, 111<sup>th</sup>, and 290<sup>th</sup>, respectively, out of 1,399 on the department's bridge deficiency list (via the bridge management program).



**County:** New Castle

**Municipality:** 

**Funding Program:** Road System – Bridges

**Functional Category:** Preservation

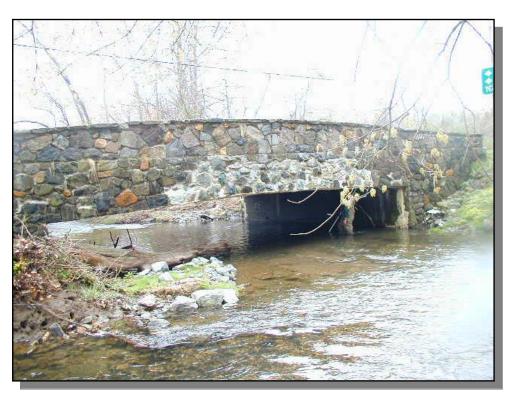
**Representative District:** 12 **Senatorial District:** 4







Bridge 1-088 Bridge 1-089





Bridge 1-090



Bridge 1-091



#### PROJECT FUNDING INFORMATION

Project	Funding Type	Original Estimate	Current Estimate	Authorization	Committed as of 06/30/04	Expended as of 06/30/04	Committed Unexpended as of 06/30/04	Authorization Available
BR 1-088, BR 1-089, BR 1-090, BR 1-091, and BR 1-093, on N247, Snuff Mill Road		\$ 2,484.0						
Prior Years	State			\$ 1,193.8	\$ 1,145.2	\$ 963.0	\$ 182.2	\$ 48.6
1 Hor Tears	Federal			\$ 1,419.3	\$ 1,419.3	\$ 1,151.5	\$ 267.8	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2004	State		\$ 2,613.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 48.6
	Federal			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
	Other			\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0
FY 2005 Authorized	State			\$ 0.0				\$ 48.6
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2006 Projected	State			\$ 0.0				\$ 48.6
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2007 Projected	State			\$ 0.0				\$ 48.6
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
FY 2008-2010 Projected	State			\$ 0.0				\$ 48.6
	Federal			\$ 0.0				\$ 0.0
	Other			\$ 0.0				\$ 0.0
Total Projected	State			\$ 1,193.8	\$ 1,145.2			\$ 48.6
	Federal			\$ 1,419.3	\$ 1,419.3			\$ 0.0
	Other			\$ 0.0	\$ 0.0			\$ 0.0
Total All Funds		\$ 2,484.0	\$ 2,613.1	\$ 2,613.1	\$ 2,564.5	\$ 2,114.5	\$ 450.0	\$ 48.6

Project #	Description	Phase	Funding Schedule	Current Estimate	Prior Years	FY 2004	FY 2005	FY 2006	FY 2007	FY 2008 -2010
	BR 1-088, BR 1-089, BR 1-090, BR 1-091, and BR 1-093, on N247, Snuff Mill Road									
20-074-03	1-088 on N247, Snuff Mill Road	RW	100% ST							
20-074-03	1-000 OH N247, SHUIT IVIIII KOAU	C	80% FHWA	\$ 9.0 600.0	\$ 9.0 600.0	\$ 0.0 0.0				
99-071-07	1-089 on N247, Snuff Mill Road	LANSC	100% ST	20.0	20.0	0.0	0.0	0.0	0.0	0.0
		С	80% FHWA	300.0	300.0	0.0	0.0	0.0	0.0	0.0
21-071-03	1-090 on N247, Snuff Mill Road	С	80% FHWA	384.1	384.1	0.0	0.0	0.0	0.0	0.0
21-071-03	1-091 on N247, Snuff Mill Road	RW	100% ST	10.0	10.0	0.0	0.0	0.0	0.0	0.0
		С	80% FHWA	490.0	490.0	0.0	0.0	0.0	0.0	0.0
21-071-03	1-093 on N247, Snuff Mill Road	C	100% ST	800.0	800.0	0.0	0.0	0.0	0.0	0.0
	Total All Funds			\$ 2,613.1	\$ 2,613.1	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0	\$ 0.0